



BETTONGIA PENICILLATA, Gray.

J. Gould and H. C. Richter, del. et lith.

Hallman and Watson, imp.



# BETTONGIA PENICILLATA, *Gray.*

## Jerboa Kangaroo.

*Bettongia penicillata*, Gray, in Mag. of Nat. Hist. new ser. vol. i. p. 584.—Waterh. Nat. Lib. Marsupialia, p. 183.—

Gould, Mon. of Macropodidæ.—Gray, List of Mamm. in Brit. Mus., p. 93.

*Hypsiprymnus murinus*, Ogilby, in Proc. of Zool. Soc., Part vi. p. 63.

———— *setosus*, Waterh. Cat. of Mamm. in Mus. Zool. Soc., p. 65.

———— (*Bettongia*) *penicillatus*, Waterh. Nat. Hist. of Mamm., vol. i. p. 212. pl. 9.

THE eastern parts of Australia, particularly the districts on the interior side of the ranges of New South Wales, constitute the true habitat of the species figured on the accompanying Plate. I observed it to be very abundant on the Liverpool Plains, and on the banks of the river Namoi, from its source to its junction with the Gwydyr; but between the ranges and the coast I did not meet with it. I do not, however, assert that it is not an inhabitant of those districts also; but, if it be, it is certain that it is far less abundant there than on the other side of the ranges. I have never seen an example from South Australia; its place in that part of the country appearing to be supplied by its near ally the *Bettongia Ogilbyi*, a species dispersed in abundance from thence to the western limits of the country, or the colony of Swan River. Mr. Waterhouse is inclined to believe that these eastern and western animals (*B. penicillata* and *B. Ogilbyi*) are merely varieties of one and the same species; and, while I admit the feasibility of this opinion, the markings and colouring of the two animals are so different, that, in a work on the Mammals of Australia, I cannot do otherwise than figure both of them, leaving their specific value to be ascertained by future zoologists, should no opportunity for fully investigating the subject occur to myself: it is just one of those cases in which a careful examination of a great number of specimens and skeletons from both localities is required to determine so dubious a question, and such materials are not at present accessible.

Like the other members of the genus, this species constructs a thick grassy nest, which is placed in a hollow scratched on the ground for its reception, so that when completed it is only level with the surrounding grass, which it so closely resembles, that without a careful survey it may be passed unnoticed: the site chosen for the nest is the foot of a bush or any large tuft of grass; during the day it is generally tenanted by one, and sometimes by a pair of these little creatures, which lying coiled in the centre are perfectly concealed from view; there being no apparent outlet, it would seem that after they have crept in they drag the grass completely over the entrance, when, as I have before stated, the whole is so like the surrounding herbage that it is scarcely perceptible. The natives, however, rarely pass without detecting its presence, and almost invariably kill the sleeping inmates, by dashing their tomahawk or heavy clubs at it. The most curious circumstance connected with the history of the Jerboa Kangaroo is the mode in which it collects the grasses for its nest: these, as may be seen in the accompanying Plate, are carried with its tail, which is strongly prehensile, and, as may be easily imagined, their appearance when leaping towards their nests with their tails loaded with grasses is exceedingly grotesque and amusing: this curious feat is even exhibited in a state of confinement, a pair in the Menagerie of the late Earl of Derby having evinced the same natural habits, by frequently loading their tails with the hay of their nests, and carrying it round the cage in which they were kept. The usual resorts of the Jerboa Kangaroo are low grassy hills and dry ridges, thinly intersected with trees and bushes; and although not strictly gregarious, numbers may be found in the same locality. It is a nocturnal animal, lying curled up in the shape of a ball during the day, and sallying forth as night approaches in quest of food, which consists of grasses and roots, the latter being procured by scratching and burrowing, for which its fore-claws are admirably adapted, and its vicinity is frequently indicated by the little excavations it has made. When startled from its nest, it bounds with amazing rapidity, and always seeks the shelter of a hollow tree, or a small hole in a rock, etc.

Fur moderately long, and not very soft to the touch; general colour brown; the hairs on the upper surface grey at the base, pencilled with rusty white near the tip, and black at the point; under surface dirty white; internal surface of the ear yellow; feet very pale brown; tail brown above and pale brown beneath, the apical quarter clothed with brownish-black hairs, which are longer than those of the other parts of the tail, and form a kind of tuft.

|                                                                 | Male. |                 | Female. |                  |
|-----------------------------------------------------------------|-------|-----------------|---------|------------------|
|                                                                 | feet. | inches.         | feet.   | inches.          |
| Length from the nose to the extremity of the tail . . . . .     | 2     | 6               | 2       | 0                |
| „ of tail . . . . .                                             | 1     | 1               |         | 11 $\frac{1}{4}$ |
| „ of tarsus and toes, including the nail . . . . .              |       | 5               |         | 4                |
| „ of arm and hand, including the nails . . . . .                |       | 3 $\frac{1}{2}$ |         | 2 $\frac{3}{4}$  |
| „ of face from the tip of the nose to the base of the ear . . . |       | 3 $\frac{1}{2}$ |         | 3                |
| „ of ear . . . . .                                              |       | 1 $\frac{1}{4}$ |         | 1                |

The figures are of the natural size.